19th International Laser Ranging Workshop LOC Meeting Summary January 28, 2014

The initial members of the Local Organizing Committee (LOC) for the October 2014 workshop met on January 28. This group consisted of:

- Carey Noll
- Mike Pearlman
- Erricos Pavlis
- Scott Wetzel
- Mark Torrence
- Lynette Queen (telecon)

Today's discussion involved ideas for logistics, the banquet, and refining the program plan.

Meeting dates:

- October 27-31, 2014
- Conflicts with MESSENGER meeting (10/28-30) and OST meeting. We will therefore have problems getting anyone from the altimetry community to attend our meeting.

Location at GSFC:

We have both the Building 8 Auditorium and Building 34/W150 and W120 reserved for the week. We will need to decide which space to use based on number of attendees. W150 has accommodated 200 people; W120 could be used for posters.

Bldg. 8 will better accommodate classroom style setup for a larger audience. If we use classroom style in W150 only 80-100 people will comfortably fit. We will probably have a mix of classroom and chair-only seating.

Posters:

Current program schedule has posters during 90 minute lunch periods on Days 2-5. Poster boards are 5'x4'. Typically laid out with 2 posters/side thus accommodating 54 posters in W120. For Bldg. 8, we will have to look at the space to see how poster boards will be arranged (Lynette). May be possible to use lobbies on floors 1 and 2.

Some ideas still under consideration to enable adequate time for poster viewing include:

- Overlapping poster viewing with 1.5-hour lunches (boxed lunches)
- Overlapping poster viewing with large (e.g., 1-1.5 hour) afternoon break
- Keeping all posters up all week
- If posters need to be rotated, having computers available to view non-displayed posters

Banquet:

Assumptions:

- Ideally, the banquet will be held Thursday, October 30. October 29 is a possibility if space is not available on the 30th.
- 150-200 attendees
- 1-2 speakers (ideas: SLR pioneer, Piers Sellers, Jim Garvin)

Lynette has checked on several possible banquet ideas:

Dinner cruise:

- Baltimore and Annapolis based companies were contacted
- Cost is \$140-\$185/person; transportation included
- Unfortunately, maximum occupancy would be ~120 people which is not adequate for our group Annapolis pub crawl:
 - Can accommodate a larger group; would divide attendees into smaller groups (~25 people/group) and conduct tours to avoid conflicts
 - \$20-40/person
 - Visit several pubs
 - No dinner included
 - Would have to investigate possible locations for dinner after pub crawl (Lynette)

Lynette has contacted the aquarium in Baltimore for events in the past; they require a donation (\$10K) similar to the Smithsonian.

On December Mike and Carey visited several Smithsonian venues (National Air and Space Museum, Castle Building, Natural History Museum) for possible workshop banquet locations. Some notes from the visit to these venues:

General comments about Smithsonian space:

- Smithsonian would need to be a co-sponsor of the banquet
- Donation is required to use any space
 - Need to determine how this can be paid for (sponsorship possible, fees collected from attendees, etc.)
- Smithsonian representative is first speaker
- Attendees are "invited"; tickets are not "sold" to attendees therefore need to be careful how we do our workshop registration
- Need to be careful how literature is printed that announces this event; there are requirements from SI

National Air and Space Museum, NASM (http://airandspace.si.edu/files/pdf/visit/multi-lingual-maps/dc-english.pdf):

- Museum closes at 5:30 and would re-open for our banquet at 7:00. Guests can stay for 3-4 hours. The museum is fully open for viewing during the whole time.
- Seated dining (circular tables) accommodating up to 200 people are possible in several areas
- Main entry "Milestones of Flight" space (from mall side)/first floor: 31 tables
- "Space Hall" space/first floor: 29 tables
- "America by Air" space/first floor: 26 tables
- "Pioneers of Flight" space/second floor: could be used for reception or dessert
- Can have dinner in one area and cocktail reception/dessert in another area
- Can set up podium/stage for presentation portion or use NASM theater
- Theater is equipped with al required AV at no additional charge. Entrance to theater on first floor and exit on second floor allows for flow to a dessert buffet after
- Using space both downstairs and upstairs will cost more for catering because two kitchens would be required
- Planetarium (20 minute shows) is available also (additional cost?)
- Museum store can also be open for guests
- Cost for using NASM: \$25K (\$17K for "friends", such as SAO and NASA)
- Have provided list of caterers and AV companies
- Right now there is a potential booking (no donation received yet) for 10/30; same for 10/29. If we

provide funds first we will be able to reserve the space

Smithsonian Institution/Castle Building (http://www.si.edu/SpecialEvents/SmithsonianCastleSpaces):

- This is the space used in the 2002 13th International Workshop on Laser Ranging
- Building closes at 5:30 and would re-open for our banquet at 7:00.
- Space consists of Great Hall, Commons Room, and Shermer Hall
- Great Hall (used in 2002) can accommodate ~200 people. Space is long and narrow making it a difficult line of sight for presentations/stage area. Could put stage in center of room. Could add monitors to help people view presentations.
- Could use Commons Room if smaller group (~130). Much nicer space.
- Could try a more casual banquet, buffet style, and use all three rooms
- Cost: \$15K (20-30% less to "friends" such as SAO)
- Have provided list of caters and AV companies (AV could also be provided by Castle bldg)
- SI needs to check on availability

Natural History Museum (http://www.mnh.si.edu/visit/images/130620 nmnh floor map.pdf):

- Museum closes at 5:30 and would re-open for our banquet at 7:00. Guests can stay for 3.5 hours. The museum is open for browsing the whole time.
- Rotunda will accommodate tables for ~200 people (around elephant)
- Cost: \$25K (~\$21K for friends)
- Cocktails could be held in "Ocean Hall"
- Stage for banquet would be set up in front of "Mammal Hall"
- Recommend hiring a lighting company for the rotunda and AV company to ensure large space was wired correctly for sound
- This would be the more involved/expensive space
- Will provide list of caters and AV companies
- SI needs to check on availability

Lynette will check on possible ways to cover the donation to the Smithsonian.

Program:

Carey distributed a draft workshop schedule. After discussion the following sessions have been proposed for the 19th workshop:

Day 1 (Monday, October 27):

- Consists of invited talks only
- Introduction by NASA and GSFC (C. Scolese, J. LaBrecque, N. White, P. Sellers?, A. Kinney)
- Logistics
- Morning: Historical Perspective
 - o 90 minutes; 3 30 minute invited talks
 - o Possible speakers:
 - Ivan Mueller: early days of space geodesy
 - Henry Plotkin: first SLR experiments at GSFC
 - Dave Smith: early SLR applications with looking forward to what's next
 Dave is able to attend workshop on Monday but will need to attend MESSENGER rest of week
- Afternoon: Programmatic
 - o 270 minutes; 9 30 minute invited talks
 - o WEGENER (S. Zerbini)

- o State of the ILRS (M. Pearlman/G. Bianco)
- o SGP (S. Merkowitz)
- o GGOS
- o Russian program
- o Chinese program
- o Other programs
- Icebreaker reception
 - Planned for Goddard Rec Center but just found out the rec center will be closed; Jan and Carey will investigate

Day 2 (Tuesday, October 28):

- Morning+first part of afternoon: Science through Missions
 - o Missions supported by SLR with emphasis on the science enabled by this support
 - o 270 minutes; 9 30 minute invited talks
 - Gravity (C. Reigber, B. Tapley)
 - Navigation(G. Beutler)
 - Timing (R. Beard); may combine with navigation talk depending upon Beutler's availability
 - ITRF/geodesy (Z. Altamimi)
 - Ocean Surface Altimetry (N. Picot, F. Lemoine); not sure who can give this talk because of conflict
 - Ice Altimetry (B. Schutz, S. Luthcke); not sure who can give this talk because of conflict
 - Lunar Science and Relativity (I. Shapiro, T. Murphy)
 - Engineering (e.g., ANDE, etc.)?
 - o Posters from all missions that inform the ILRS of its support (success/failure), what the data are used for, etc
- Afternoon: Future Missions and the Role of SLR
 - o 150 minutes; 5 30 minute talks
 - o Applications of SLR for GNSS
 - Science perspective; why is SLR important to GNSS; M. Rothacher would be excellent for this topic
 - o ILRS plans for many satellite GNSS support
 - Others need to be identified

Day 3 (October 29):

- Morning: Advanced Techniques (J. Degnan/J. McGarry for session planning)
 - o 180 minutes
 - Advances in SLR engineering
- Afternoon: Beyond GEO
 - o 90 minutes
 - o Includes lunar, transponder, etc.
- Joint Scientific/Engineering Colloquium
 - o Both colloquium committees have accepted proposal
 - o J. Degnan has accepted
 - o Bldg. 8 Auditorium
 - o GSFC audience in addition to workshop attendees
- Tour of GGAO

Day 4 (October 30):

- Morning: New Technologies and Looking Forward
 - o 180 minutes

- Afternoon: Core Site and Components
 - o 240 minutes
 - o Topics:
 - Overview
 - Site ties
 - VLBI, DORIS, GNSS overviews, highlighting future plans/technology
 - Timing
 - RFI
- Banquet

Day 5 (October 31):

- Operations day
- Close at 3:00
- Morning
 - o 180 minutes
 - Mix of talks and panel
 - Topics on station operations
 - o Importance to ensure data product
 - Station issues (from station perspective)
- Afternoon
 - o 90 minutes
 - o Close/wrap up
 - Station clinics possible
 - Allow analysts to work with the station contacts in small groups to highlight what is right and
 what is wrong with their data, etc. Similar to the Technical Operations Workshop (TOW) that the
 IVS sponsors. Time needs to be devoted to the logistics and planning for this type of session.
 - o Non-station attendees could leave early.

Splinter sessions:

- Current schedule shows splinter sessions on Sunday (10/26) and Tuesday.
- GSFC security requires foreign nationals off center by 6:00 and weekends not feasible
- Will need alternative locations for these splinter sessions:
 - o Contractor facility (SGT, HTSI, UMBC)
 - o Visitor center?
 - o Hotels?

Near-term actions:

- Comment on program so topics can be finalized
- Identify program committee based on final program
- Define and contact potential speakers for Day 1 and 2 (All)
- Continue to investigate options for gala/banquet (Carey, Mike, Lynette)
- Determine where and how many poster boards can be placed in Building 8.
- Investigate paying for donation for banquet spaces
- Contact GSFC (Codes 100, 600, 690) and HQ management to invite them to speak at the workshop (Stephen?)
- Check on locations for splinter session locations at hotels/visitor center (Lynette)